

**In the Claims:**

1. (Currently amended) A system, comprising:

a processor;

a memory coupled to the processor and configured to store program instructions executable by the processor to implement:

a knowledge automation engine comprising:

a knowledge interface to receive one or more checks and one or more corresponding product check matrixes from a knowledge repository, wherein the one or more corresponding product check matrixes specify one or more of packages or ~~and~~ patches applicable to one or more product issues;

a fact interface to receive one or more facts describing a product configuration;

wherein the knowledge automation engine automatically evaluates a rule in the one or more checks against the one or more facts to determine if the one or more product issues specified by the one or more checks exists for the product configuration; and

wherein if the one or more product issues are detected, the knowledge automation engine applies one or more of packages or ~~and~~ patches specified in the one or more corresponding product check matrixes to correct the one or more product issues.

2. (Currently amended) The system as recited in claim 1, wherein the one or more of packages or patches specified by the one or more product check matrixes comprises:

a package; and

a patch associated with the package.

3. (Original) The system as recited in claim 2, wherein the association between the package and the patch is predefined.

4. (Original) The system as recited in claim 2, wherein if the patch associated with the package is updated with a new patch in a database accessible by the knowledge automation engine, the association with the package is updated with the new patch.

5. (Cancelled).

6. (Currently amended) The system as recited in claim 1, wherein the one or more of packages or patches specified ~~identified~~ in the one or more product check matrixes are stored in a separate database than the one or more product check matrixes.

Claims 7-42 (Cancelled).

43. (New) The system of claim 1, wherein a product check matrix of the one or more product check matrixes specifies one or more of packages or patches directly applicable to a specific product issue detectable by executing the rule of a check associated with the corresponding product check matrixes.

44. (New) The system of claim 43, wherein the one or more product check matrixes further comprises a problem statement corresponding to the specific product issue.

45. (New) The system of claim 44, wherein the one or more product check matrixes further comprises a link to reference documentation corresponding to the specific product issue.

46. (New) The system of claim 44, wherein the one or more product check matrixes are included in a single file.

47. (New) The system of claim 1,

wherein a product check matrix of the one or more product check matrixes specifies a patch for a specific product issue of the one or more product issues and wherein the product check matrix of the one or more product check matrixes corresponds to a specific check of the one or more checks;

wherein the specific check of the one or more checks comprises a rule to detect the specific product issue; and

wherein upon detecting the specific product issue, the specified patch, for the specific product issue, from the corresponding product check matrix is applied to correct the specific product issue.

48. (New) A method, comprising:

listing one or more of packages or patches in a product check matrix, wherein the product check matrix corresponds to one or more product issues;

defining one or more check elements related to the one or more product issues, wherein the one or more check elements includes a rule and wherein the one or more check elements are linked to the corresponding product check matrix with the one or more of packages or patches for correcting the one or more product issues; and

evaluating the rule against a fact to determine if the one or more product issues is present on a product.

49. (New) The method as recited in claim 48, further comprising retrieving the fact from a fact repository about the product.

50. (New) The method of claim 48, further comprising applying the one or more of the packages or patches to the product specified in the corresponding product check matrix when the one or more product issues are discovered by evaluating the rule.

51. (New) The method of claim 48, wherein the listing of one or more of packages or patches is specific to one product issue of the one or more product issues and is located in a single file.

52. (New) The method as recited in claim 48,

wherein the one or more of packages or patches listed by the product check matrix includes at least a package and a patch associated with the package; and

wherein the method further comprises defining one or more associations between the package in the product check matrix and the patch.

53. (New) The method as recited in claim 52, wherein if the patch corresponding to the one or more associations is updated, the one or more associations are updated to indicate the updated patch.

54. (New) The method as recited in claim 48,

wherein the one or more of packages or patches listed by the product check matrix includes at least a package and a patch associated with the package;

wherein the method further comprises defining one or more associations between the package and the patch in the product check matrix; and

wherein the one or more associations are defined according to patch updates applied to the package in a database accessible by a knowledge automation engine.

55. (New) The method as recited in claim 54, further comprising disassociating the one or more associations formed between the package and the patch if the patch is replaced.

56. (New) The method as recited in claim 48, wherein the one or more check elements are defined in a separate check.

57. (New) The method as recited in claim 48, wherein the one or more check elements are used with the corresponding product check matrix.

58. (New) The method as recited in claim 48, wherein the one or more check elements are selected from the rule, a problem statement, or a link to reference documentation.

59. (New) A system, comprising:

a processor;

a memory coupled to the processor and configured to store program instructions executable by the processor to:

receive a listing one or more of packages or patches in a product check matrix, wherein the product check matrix corresponds to one or more product issues;

receive a definition of one or more check elements related to the one or more product issues, wherein the one or more check elements includes a rule and wherein the one or more check elements are linked to the corresponding product check matrix with the one or more of packages or patches for correcting the one or more product issues; and

evaluate the rule against a fact to determine if the one or more product issues is present on a product.

60. (New) The system as recited in claim 59, wherein the program instructions are further executable to retrieve the fact from a fact repository about the product.

61. (New) The system of claim 59, wherein the program instructions are further executable to apply the one or more of the packages or patches to the product specified in the corresponding product check matrix when the one or more product issues are discovered by evaluating the rule.

62. (New) The system of claim 59, wherein the listing of one or more of packages or patches is specific to one product issue of the one or more product issues and is located in a single file.

63. (New) The system as recited in claim 59,

wherein the one or more of packages or patches listed by the product check matrix includes at least a package and a patch associated with the package; and

wherein the program instructions are further executable to define one or more associations between the package in the product check matrix and the patch.

64. (New) The system as recited in claim 63, wherein if the patch corresponding to the one or more associations is updated, the one or more associations are updated to indicate the updated patch.

65. (New) The system as recited in claim 59,

wherein the one or more of packages or patches listed by the product check matrix includes at least a package and a patch associated with the package;

wherein the program instructions are further executable to define one or more associations between the package and the patch in the product check matrix; and

wherein the one or more associations are defined according to patch updates applied to the package in a database accessible by a knowledge automation engine.

66. (New) The system as recited in claim 65, wherein the program instructions are further executable to disassociate the one or more associations formed between the package and the patch if the patch is replaced.

67. (New) The system as recited in claim 59, wherein the one or more check elements are defined in a separate check.

68. (New) The system as recited in claim 59, wherein the one or more check elements are used with the corresponding product check matrix.

69. (New) The system as recited in claim 59, wherein the one or more check elements are selected from the rule, a problem statement, or a link to reference documentation.

70. (New) A method, comprising:

receiving a check from a knowledge repository, wherein the check comprises a rule for detecting a specific product issue;

receiving a fact describing a product configuration;

evaluating the rule against the fact to determine if the specific product issue exists for the product configuration; and

applying a package listed in a product check matrix to correct the specific product issue, wherein the product check matrix is associated with the check and the specific product issue and is selectively accessed to determine a package to use to correct the specific product issue.

71. (New) The method of claim 70, further comprising automatically updating the product check matrix with a listing of an updated package.

72. (New) The method of claim 70, wherein the product check matrix further comprises a problem statement and a link to reference documentation.

73. (New) The method of claim 72, wherein the rule for the check corresponds to the problem statement in the corresponding product check matrix.



74. (New) The method of claim 70, further comprising automatically updating the product check matrix with a listing for a patch corresponding to the package.

75. (New) The method of claim 70, further comprising receiving the corresponding product check matrix with the check.

76. (New) A system, comprising:

a processor;

a memory coupled to the processor and configured to store program instructions executable by the processor to:

receive a check from a knowledge repository, wherein the check comprises a rule for detecting a specific product issue;

receive a fact describing a product configuration;

evaluate the rule against the fact to determine if the specific product issue exists for the product configuration; and

apply a package listed in a product check matrix to correct the specific product issue, wherein the product check matrix is associated with the check and the specific product issue and is selectively accessed to determine a package to use to correct the specific product issue.

77. (New) The system of claim 76, wherein the program instructions are further executable to automatically update the product check matrix with a listing of an updated package.

78. (New) The system of claim 76, wherein the program instructions are further executable to automatically update the product check matrix with a listing for a patch corresponding to the package.

79. (New) The system of claim 76, wherein the program instructions are further executable to receive the corresponding product check matrix with the check.